AMENDMENTS TO THE CLAIMS

1-21 (Cancelled)

22. (Previously Presented) An isolated nucleic acid having at least 80% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(b) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, lacking its associated signal peptide, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(c) the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation; or

(f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation.

23. (Previously Presented) The isolated nucleic acid of Claim 22 having at least 85% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(b) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, lacking its associated signal peptide, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(c) the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation; or

(f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation.

24. (Previously Presented) The isolated nucleic acid of Claim 22 having at least 90% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(b) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, lacking its associated signal peptide, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(c) the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation; or

(f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation.

25. (Previously Presented) The isolated nucleic acid of Claim 22 having at least 95% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(b) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, lacking its associated signal peptide, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(c) the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation; or

(f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation.

26. (Previously Presented) The isolated nucleic acid of Claim 22 having at least 99% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(b) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, lacking its associated signal peptide, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(c) the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

(d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation; or

(f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation.

27-35 (Cancelled)

36. (Currently Amended) An ~~The~~ isolated nucleic acid that hybridizes under stringent conditions to:

(a) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2;

(b) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2;

(c) the nucleic acid having the sequence of SEQ ID NO:1;

(d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:1; or

(f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581;

~~wherein said hybridization occurs under stringent conditions,~~ wherein the stringent conditions comprise:

50% formamide;

5 x SSC (0.75 M NaCl, 0.075 M sodium citrate);

50 mM sodium phosphate (pH 6.8);

0.1% sodium pyrophosphate;

5 x Denhardt's solution;

sonicated salmon sperm DNA (50 micrograms/ml)

0.1% SDS, and 10% dextran sulfate at 42°C;

washes at 42°C in 0.2 x SSC (sodium chloride/sodium citrate) and 50% formamide at 55°C; and

a high-stringency wash consisting of 0.1 x SSC containing EDTA at 55°C.

37. (Cancelled)

38. (Previously Presented) A vector comprising the nucleic acid of Claim 22.

39. (Previously Presented) The vector of Claim 38, wherein said nucleic acid is operably linked to control sequences recognized by a host cell transformed with the vector.

40. (Previously Presented) A host cell comprising the vector of Claim 38.

41. (Previously Presented) The host cell of Claim 40, wherein said cell is a CHO cell, an *E. coli* or a yeast cell.

42. (New) An isolated nucleic acid comprising:

(a) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2;

(b) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, lacking its associated signal peptide;

(c) the nucleic acid having the sequence of SEQ ID NO:l;

(d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:l; or

(f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581.

43. (New) The isolated nucleic acid of Claim 27 comprising a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2.

44. (New) The isolated nucleic acid of Claim 27 comprising a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, lacking its associated signal peptide.

45. (New) An isolated nucleic acid comprising the nucleic acid having the sequence of SEQ ID NO: 1.

46. (New) An isolated nucleic acid comprising a fragment of the nucleotide sequence of SEQ ID NO:1, wherein said fragment comprises nucleotides 486-577 of SEQ ID NO:1.

47. (New) The isolated nucleic acid of Claim 46, wherein said fragment consists essentially of nucleotides 486-577 of SEQ ID NO:1.

48. (New) An isolated nucleic acid comprising a fragment of the nucleotide sequence of SEQ ID NO:1, wherein said fragment comprises one or more nucleotide sequences from SEQ ID NO:1 selected from the group consisting of nucleotides 169-273, 178-282, 160-264, 241-342, 232-333, 187-288, 151-252, 133-232, 142-241, 97-198, 198-297, 124-225, 403-507, 604-663, and 703-732.

49. (New) An isolated nucleic acid comprising a nucleotide sequence which encodes a fragment of the amino acid having the sequence of SEQ ID NO:2, wherein said fragment comprises amino acids 137-167 of SEQ ID NO:2.

50. (New) The isolated nucleic acid of Claim 49, wherein the encoded fragment consists essentially of amino acids 137-167 of SEQ ID NO:2.

51. (New) An isolated nucleic acid comprising a nucleotide sequence which encodes a fragment of the amino acid having the sequence of SEQ ID NO:2, wherein the encoded fragment comprises one or more amino acid sequences from SEQ ID NO:2 selected from the group consisting of amino acids 57-91, 60-94, 54-88, 81-114, 78-111, 63-96, 51-84, 45-78, 48-81, 33-66, 66-99, 42-75, 135-169, 202-221, and 235-244.